

Title (en)
Laser system for corneal transplant surgery

Title (de)
Lasersystem für die Hornhauttransplantation

Title (fr)
Système à laser pour la transplantation cornéenne

Publication
EP 1260202 B1 20050824 (DE)

Application
EP 02005281 A 20020311

Priority
DE 10124358 A 20010518

Abstract (en)
[origin: US2002173779A1] A laser system serves for corneal grafting by photodisruptive laser cutting. To this end, short laser pulses within the range from 1 fs to 10 ns are positioned and guided in the cornea in such a way that the foci (20) of the laser pulses describe an incision path in the cornea (12) that exhibits an undercut, so that a seal between the juxtaposed surfaces of the implant and of the residual cornea arises between a donor implant and the recipient cornea which is promoted by the overpressure of the eye

IPC 1-7
A61F 9/01; **A61F 9/008**

IPC 8 full level
A61F 9/008 (2006.01); **A61F 9/01** (2006.01); **A61F 9/013** (2006.01)

CPC (source: EP US)
A61F 9/008 (2013.01 - EP US); **A61F 9/00831** (2013.01 - EP US); **A61F 9/013** (2013.01 - EP US); **A61F 2009/00872** (2013.01 - EP US)

Cited by
DE102007019815A1; IT201800009697A1; IT201800009699A1; US10362937B2

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)
US 2002173779 A1 20021121; **US 6805694 B2 20041019**; AT E302576 T1 20050915; DE 10124358 C1 20021017; DE 50204004 D1 20050929; EP 1260202 A1 20021127; EP 1260202 B1 20050824; EP 1260202 B2 20101208; ES 2245384 T3 20060101; ES 2245384 T5 20110301

DOCDB simple family (application)
US 14190202 A 20020508; AT 02005281 T 20020311; DE 10124358 A 20010518; DE 50204004 T 20020311; EP 02005281 A 20020311; ES 02005281 T 20020311